



WEEKLY OVERSIGHT REPORT

CH2MHILL**Weekly Summary Report****USEPA Oversight, Sauget Area 2, Sauget, IL****WA No. 224-RXBF-05XX / Contract No. 68-W6-0025****Week Ending Friday, July 30, 2004**

This report summarizes the Interim Remedial Action (IRA) work conducted by Solutia and its contractors from July 26, 2004 through July 30, 2004 at Site R, Sauget Area 2. The current IRA fieldwork consists of site preparation, barrier wall trenching, and backfilling, with excavation performed on day and night shifts.

Contractors Onsite

Inquip Associates Inc. (barrier wall construction contractor)

PSI (geotechnical testing subcontractor)

URS (primary consultant for Solutia)

Work Performed This Week

Work during the week consisted primarily of backfill placement and trench excavation in the northern open trench segment. No backfill or excavation took place on July 30, due to ponding of stormwater at the site following heavy rain.

Backfill was placed on three days during the week into the southern open trench, decreasing this trench segment to approximately 320 feet in length. It is anticipated that the southern open trench segment will be closed with backfill during the next week.

Excavation continued with the Koehring 1266 trackhoe and the Liebherr 843 hydraulic clamshell in the northern open trench segment during the week, increasing this trench segment to approximately 540 feet in length.

Groundwater Migration Control System (GMCS)

The river elevation decreased slightly during the week, from 392.48 feet above mean sea level (amsl) on July 23, 2004 to 390.60 feet amsl on July 30, 2004. Correspondingly, the combined flow rate of the extraction well system increased from 1,020 gallons per minute (gpm) on July 23 to 1,126 gpm on July 30. The GMCS system was turned off for approximately four hours on July 30, at the request of American Bottoms Regional Wastewater Treatment Facility (ABRTF), following significant rainfall in the area. The system had resumed pumping groundwater by the end of the day.

Eight barrier wall piezometers, with four inside and four outside the barrier wall alignment, monitored the groundwater elevations adjacent to the barrier wall alignment during the week. Table 1 shows the river and piezometer water elevations measured on July 30, 2004 (4:00 PM). Piezometer 4E, located at the south end of Site R near the current backfill mix pad, was reading erratically during the week. URS will access the piezometer next week to troubleshoot the problem.

The piezometer pairs generally showed an outward gradient across the barrier wall during the week, with between ½ foot to four feet difference between the piezometers located upgradient of the wall alignment and the corresponding paired piezometer downgradient. The river level was approximately equal to slightly lower than the water levels at the piezometers located upgradient of the barrier wall during the week. However, the river level remained generally higher than the piezometers located outside the barrier wall (now constructed at all piezometer pairs except P1), indicating an inward groundwater flow from the river toward Site R.

TABLE 1
River and Piezometer Water Elevations – July 30, 2004 (16:00)

	Elevation (ft above mean sea level)
River Level	390.60
Piezometer 1S – inside wall (northern-most pair)	390.53
Piezometer 1N – outside wall (northern-most pair)	389.85
Piezometer 2E – inside wall (north-central pair)	391.69
Piezometer 2W – outside wall (north-central pair)	388.36
Piezometer 3E – inside wall (south-central pair)	390.87
Piezometer 3W – outside wall (south-central pair)	388.42
Piezometer 4E – inside wall (southern-most pair)	390.06
Piezometer 4W – outside wall (southern-most pair)	389.92

Stormwater

Approximately four inches of rain fell overnight and the morning of July 30, causing significant pooling of stormwater at Site R. Stormwater was pumped from within the exclusion zone to the north modutank on July 30. The flocculation system operated on July 30, and the stormwater was discharged to ABRTF via the pipeline to convey groundwater from the GMCS. Stormwater will continue to be managed on Saturday July 31.

Barrier Wall Construction

Inquip continued excavation of the northern open trench along the barrier wall alignment extending the trench excavation to station 29+90, approximately 540 linear feet in length. The southern open trench segment was closed during the week by about 200 linear feet of backfill material daylighting to ground surface. As of July 29, the southern open trench segment was approximately 320 feet in length along the barrier wall alignment from station 5+00 at the southeast terminus of the wall, to station 8+20.

Inquip continued excavation in the northern open trench on a second shift this week. During the night shift, the Liebherr 843 hydraulic clamshell rig excavated and slurry was pumped into the trench as necessary. No backfill activity occurred during the night shift.

The Koehring KH1266 trackhoe did not excavate from July 28 through the end of the week; this rig will not operate until approximately August 9, while an engine is replaced. The Liebherr 853 hydraulic clamshell did not operate during the week, as maintenance was performed on the rig.

During the week, the trench depths in the south open excavation were measured each afternoon while the trench depths in the north open excavation were measured each morning. The trench depth measurements from the profile measured on July 29 are shown in Table 2, and depicted in Graphs 1 and 2 (for the southern and northern open trench segments) in comparison to the trench depth profile measured on July 23. Graph 3 shows the overall progress of the barrier wall construction. Note that the trench profile was not measured on July 30; only stormwater activities occurred on this day.

Slurry

Three truck trailer loads of bentonite gel were used to mix fresh slurry on three days during the week. Fresh slurry, when pumped from the holding pond to the northern open trench segment near station 24+50, was tested frequently to assess its viscosity and adjusted with a blending pump using water from the fire hydrant, as necessary. The viscosity of the slurry was measured using a Marsh funnel, with results generally meeting the specification.

Trench slurry was pumped from the top of the southern open trench, adjacent to the desander outlet, to the containment pond on top of the landfill during the early part of the week. On July 28, the slurry remaining in the trench became too viscous for the desander to operate. Remaining slurry in the southern open trench will be scooped from the excavation using a trackhoe. This occurrence was anticipated, per a June 22, 2004 letter from Inquip to Solutia, as the viscosity and density of the trench slurry were expected to increase during the closure of the southern leg of the barrier wall.

Fresh or recycled bentonite slurry was pumped into the northern open trench as needed to keep the excavation open on three days during the week. Recycled slurry was pumped from the containment berm on top of the landfill. Slurry samples were collected from the top and the bottom of the trench daily and were tested for viscosity, density (unit weight), filtrate loss, pH and sand content. Analysis of fresh slurry and trench slurry samples from the northern trench segment either met the specifications or satisfied the quality targets.

Spoils Handling

During the week, spoils were transferred from adjacent to the northern open trench segment or from the temporary stockpile on top of the landfill to the backfill mix pad near station 10+50.

Backfill and Trench Cleaning

During the week, Inquip mixed and placed into the southern open trench segment approximately 1,320 cubic yards of backfill material. Backfill operations took place on three days during the week. Trench spoils were transported to the backfill mix pad near station 8+40. The backfill spoils were mixed with an approximately two percent of dry bentonite and slurry as necessary to meet quality specifications.

The backfill was tested by PSI for slump, unit weight and moisture content. The unit weight of backfill placed during the week measured between 121 and 126.5 pounds per cubic foot (pcf). Slump test results were between 4.0 to 4.7 inches, and the moisture content results ranged from 20.0 to 23.0 percent. All test results met the minimum requirements. Tests on

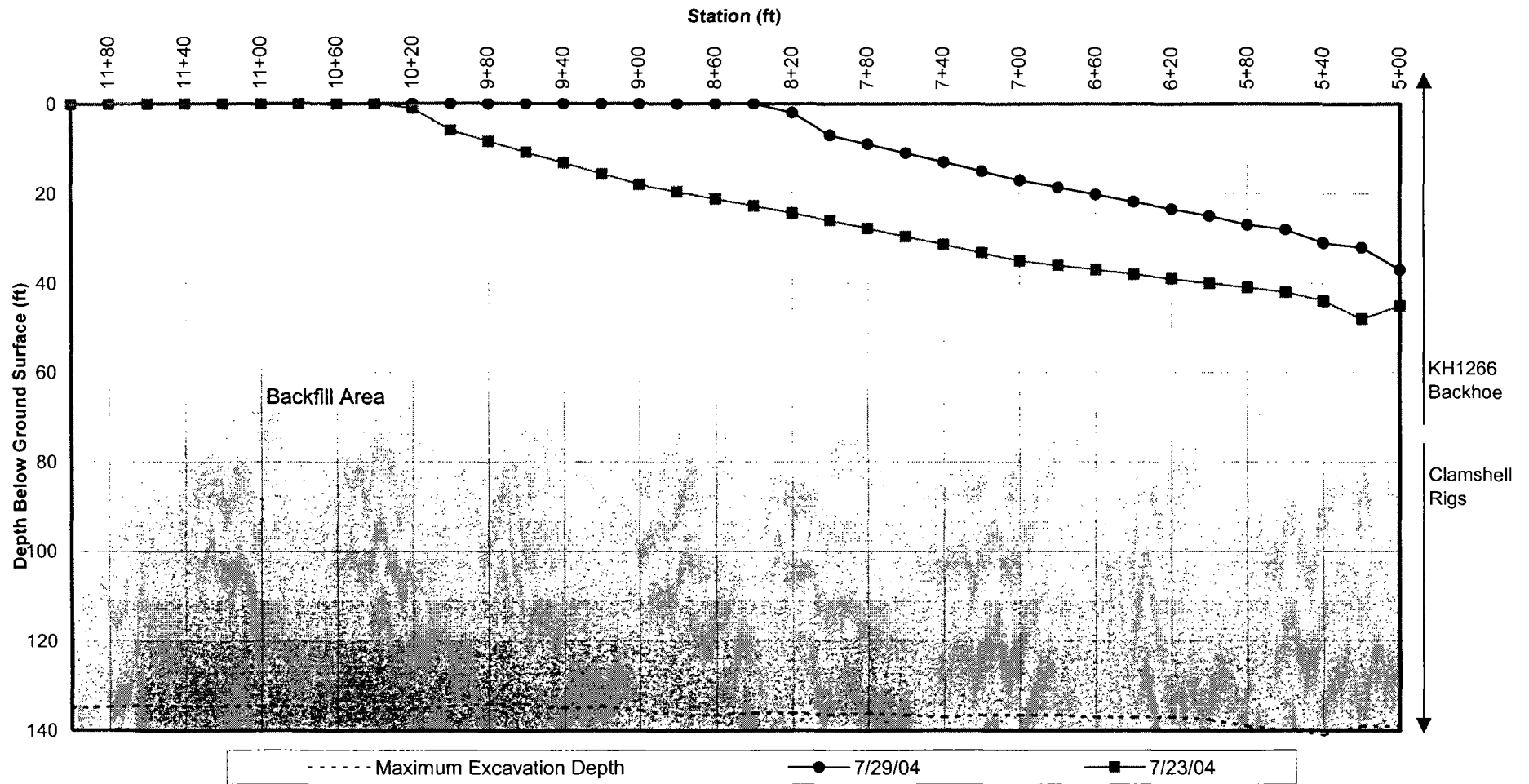
the backfill mixture to be conducted offsite by Mueser-Rutledge and PSI's labs included permeability and gradation. Recent available test results from offsite labs were reviewed during the week. Three gradation analysis results on samples collected through July 1, and analyzed by PSI's lab were reviewed, all results passed specifications.

Prior to backfill placement in the southern open trench, the top of the backfill was cleaned over a 40-foot linear stretch, using the 855 clamshell rig. Two samples were collected by PSI with a clam sampler from the top of the backfill prior to backfill placement. These samples were visually checked to ensure that the backfill surface in the trench was clean and free of any sand.

TABLE 2
Trench Profile (Downrigger Measurements) for the Barrier Wall Trench – July 29, 2004 (PM)

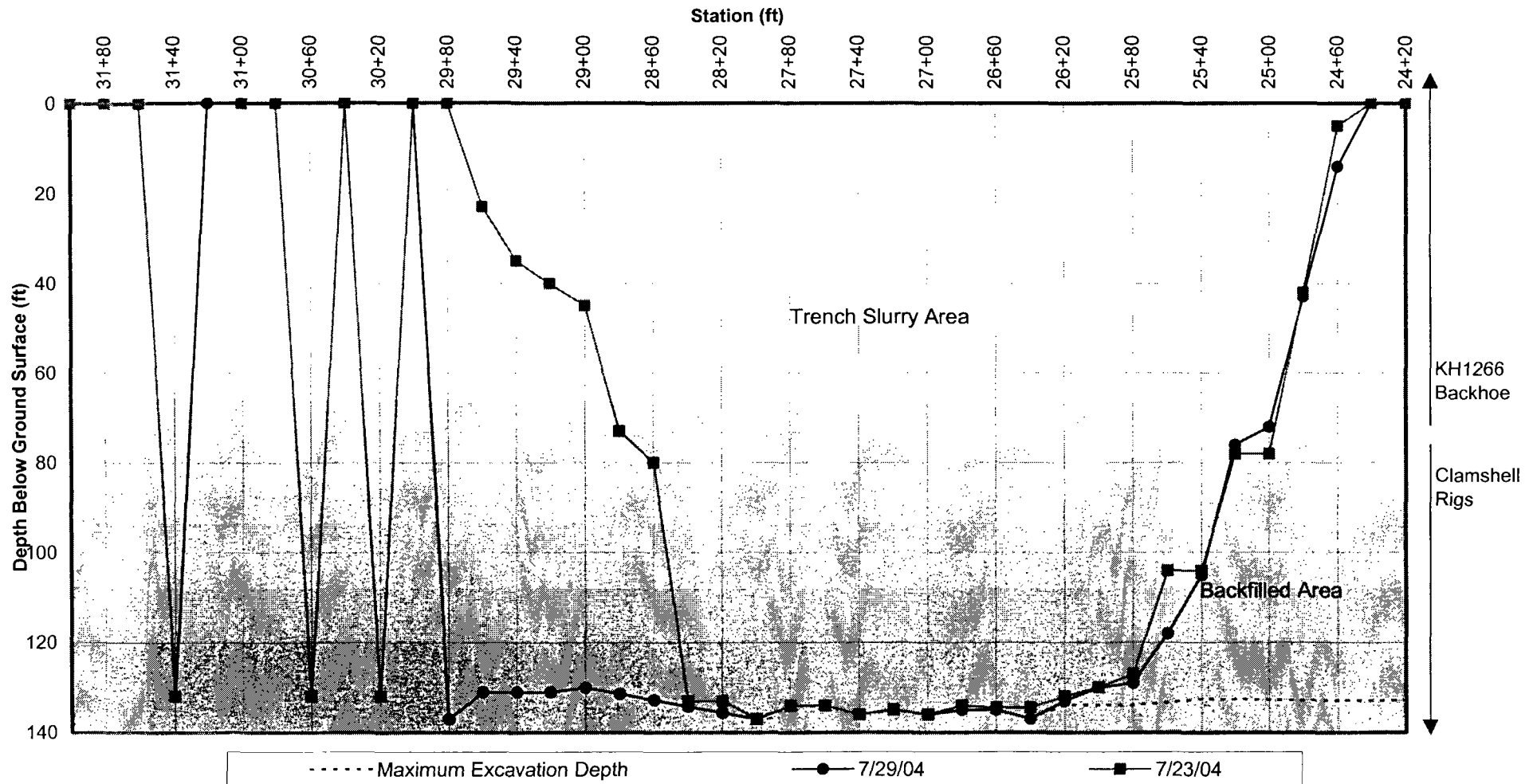
Trench Segment	Station ID	Depth to bottom (ft below ground surface)
Southern Open Trench	5+00	37
	5+20	32
	5+40	31
	5+60	28
	5+80	27
	6+00	25
	7+00	17
	8+00	7
	8+20	2
Northern Open Trench	24+50	3
	25+00	72
	25+20	76
	25+40	105
	25+60	118
	25+80	129
	26+00	130
	26+20	133
	26+40	137
	26+60	135
	26+80	135
	27+00	136
	28+00	137
	29+00	130
	29+30	131
	29+60	131
	29+90	137

Graph 1 - Weekly Barrier Wall Construction Progress - Southern Open Trench Segment
July 26 through July 29, 2004

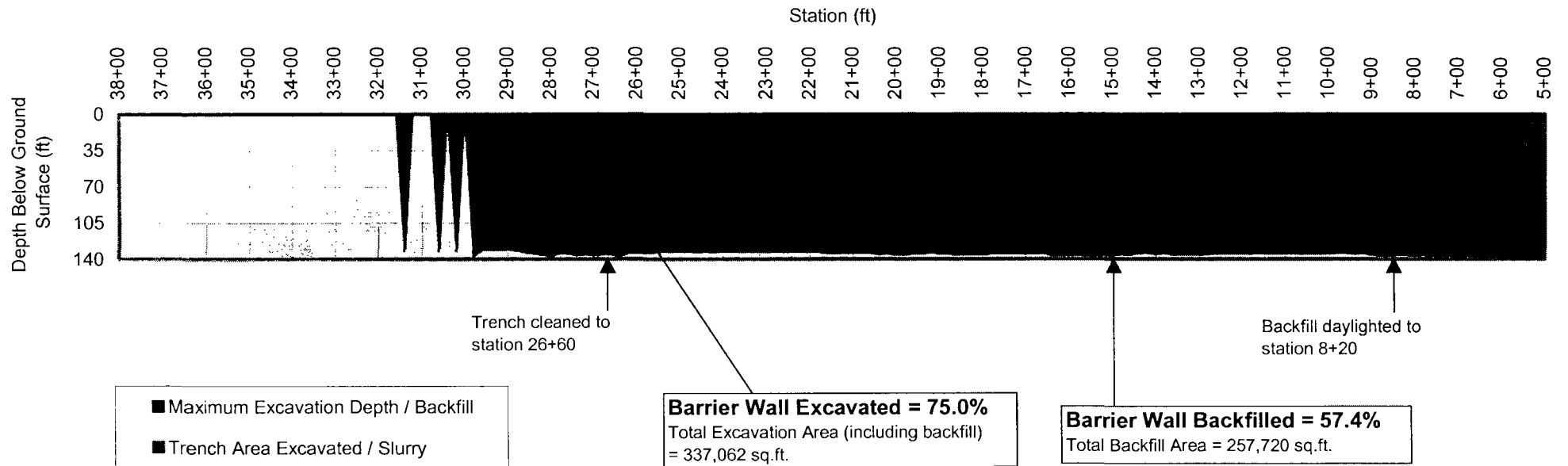


Note: Data plotted for the week through measurements on 7-23-04 and 7-29-04.
 Some data points are interpolated between the available data points where trench depths were read.

Graph 2 - Weekly Barrier Wall Construction Progress - Northern Open Trench Segment
July 26 through July 29, 2004



Note: Data plotted for the week through measurements on 7-23-04 and 7-29-04.
 Some data points are interpolated between the available data points where trench depths were read.

Graph 3 - Barrier Wall Construction Progress by July 30, 2004 (PM)

Note: Data plotted for the week through PM measurements on 7-29-04